

CLAIMS

1 1. A method of generating a variable data file to be used to generate custom printed
2 articles, the method comprising the steps of:
3 reading a template including a plurality of tokens;
4 generating a data structure including a plurality of printed article ID's;
5 identifying a record in a database using a first printed article ID, and
6 extracting data from a field of the record which is specified by a first token in the
7 plurality of tokens; and
8 outputting the data to the variable data file.

1 2. The method according to claim 1 further comprising the steps of:
2 incrementing an index to point to a second printed article ID in the data structure in
3 response to reading a second token in the template.

1 3. The method according to claim 1 further comprising the step of:
2 outputting plain text included in a third token to the variable data file.

1 4. The method of claim 1 wherein the step of identifying a record in a database
2 comprises the step of:
3 using the order ID and printed article ID to identify a record in a database.

1 5. The method according to claim 1 wherein the step of generating a data structure
2 comprises the sub-step of:
3 producing an array of printed article IDs, in which the printed article IDs are arranged
4 in order corresponding to the layout of corresponding printed articles on a printing medium.

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1 6. The method according to claim 1 further comprising the steps of:
2 incrementing an index to point to a second printed article ID in the array in response
3 to reading a second token in the template.

1 7. The method of claim 1 wherein the step of generating a data structure comprises
2 the sub step of:
3 generating a data structure comprising a plurality of entries, each of which includes
4 a printed article ID.

1 8. The method according to claim 1 further comprising the step of:
2 calling a function specified by a function named in the first token to process the
3 data.

1 9. The method according to claim 8 wherein processing performed by the function
2 comprises a sub-step of:
3 validating the data.

1 10. The method according to claim 8 wherein processing performed by the function
2 comprises a sub -step of:
3 formatting the data.

1 11. The method of claim 1 wherein the step of generating a data structure comprises
2 the sub step of:
3 generating an array having a number of columns equal to a number of columns in
4 which printed articles are printed on a web, and a number of rows equal to a number of
5 rows of printed articles to be printed on the web, in which each array entry includes a order
6 ID and a printed article ID.

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1 13. A computer readable medium containing programming instructions for generating
2 a variable data file to be used to generate custom printed articles, the computer readable
3 medium including programming instructions for:

- 4 reading a template including a plurality of tokens;
- 5 reading a data structure including a plurality of printed article ID's;
- 6 identifying a record in a database using a first printed article ID;
- 7 extracting data from a field of the record which is specified by a first token; and
- 8 outputting the data to a variable data file.

1 14. The computer readable medium according to claim 13 wherein the programming
2 instructions for generating a data structure include programming instructions for:

- 3 generating a array having a number of columns equal to a number of columns in
4 which printed articles are printed on a web, and a number of rows equal to a number of
5 rows of printed articles to be printed on the web, in which each array entry includes a order
6 ID and a printed article ID.

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- 1 15. A system for producing custom printed articles comprising:
- 2 a high speed printer;
- 3 a computer electrically coupled to the high speed printer the server including:
- 4 a means for reading a template including a plurality of tokens;
- 5 a means for reading a data structure including a plurality of printed article
- 6 ID's;
- 7 a means for identifying a record in a database using a first printed article ID;
- 8 a means for extracting data from a field of the record which is specified by
- 9 a first token included in the plurality of tokens; and
- 10 a means for outputting the data to a variable data file.

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1 17. A computer readable medium having stored thereon a data structure comprising:
2 an array having a number of columns equal to the number of columns in which a
3 plurality of printed articles are to be printed, and a number of rows equal to a number of
4 rows in which the plurality of printed articles are to be printed, the array including a plurality
5 of array entries each of which includes a printed article ID.

1 18. The computer readable medium according to claim 17 wherein:
2 each array entry includes a printed article group ID.

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- 1 19. A system for producing custom printed articles comprising:
- 2 a high speed printer;
- 3 a computer electrically coupled to the high speed printer the server including:
- 4 a processor programmed to:
 - 5 read a template including a plurality of tokens;
 - 6 read a data structure including a plurality of printed article ID's;
 - 7 identify a record in a database using a first printed article ID;
 - 8 extract data from a field of the record which is specified by a first token
 - 9 included in the plurality of tokens; and
 - 10 output the data to a variable data file.

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